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(71) Applicant (for all designated States except US):
**ZYMENEX A/S [DK/DK]; Roskildevej 12C, DK-3400
Hillerød (DK).**

(72) Inventors; and

(75) Inventors/Applicants (for US only): **FOGH, Jens**

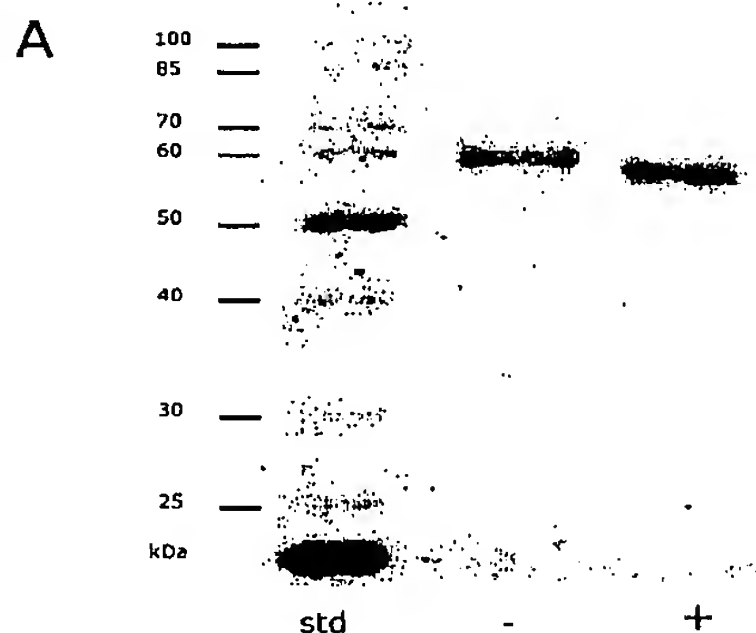
[DK/DK]; Bjergagervej 37, DK-3540 Lynge (DK). **AN-
DERSSON, Claes [SE/SE]; Tallåsvägen 5, S-187 43 Täby
(SE). WEIGELT, Cecilia [SE/SE]; Banérgatan 27, 1 tr.,
S-115 22 Stockholm (SE). MØLLER, Christer [SE/SE];
Lindvägen 26, S-246 53 Tullinge (SE). HYDÉN, Pia
[SE/SE]; Dalgangen 6, S-182 74 Stocksund (SE).**

(74) Agent: **PLOUGMANN & VINGTOFT A/S; Sundkrogs-
gade 9, Post Office Box 831, DK-2100 Copenhagen_Ø
(DK).**

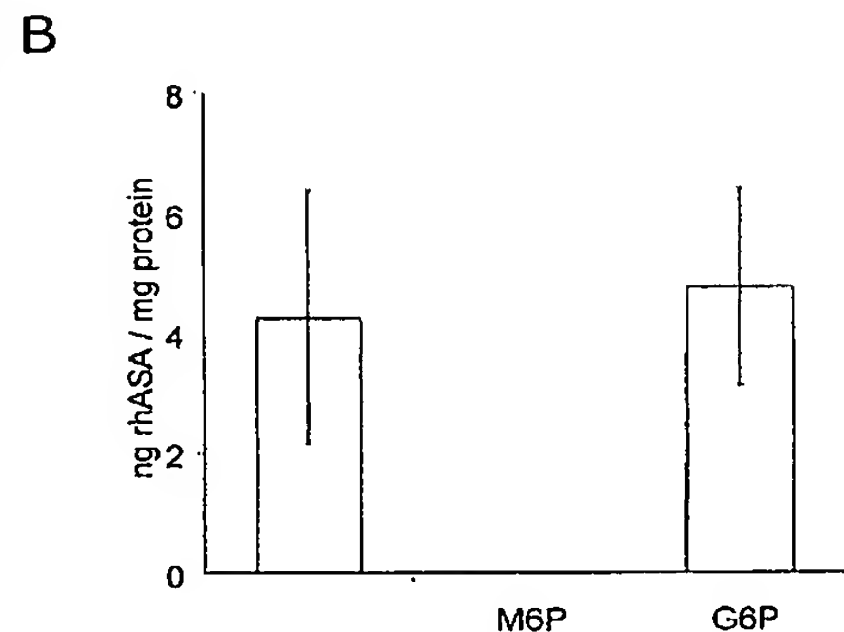
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(54) Title: **PRODUCTION AND PURIFICATION OF RECOMBINANT ARYLSULFATASE A**



(57) Abstract: The present invention pertains to a process for production of recombinant arylsulfatase A in a cell culture system, the process comprising culturing a mammalian cell capable of producing rASA in liquid medium in a system comprising one or more bio-reactors; and concentrating, purifying and formulating the rASA by a purification process comprising one or more steps of chromatography. Other aspects of the invention provides a pharmaceutical composition comprising rASA, which is efficiently endocytosed via the mannose-6-phosphate receptor pathway *in vivo* as well as a rhASA a medicament and use of a rhASA for the manufacture of a medicament for reducing the galactosyl sulphatide levels within target cells in the peripheral nervous system and/or within the central nervous system in a subject. A final aspect of the invention provides a method of treating a subject in need thereof, said method comprising administering to said subject a pharmaceutical composition comprising a rhASA and thereby obtaining a reduction in the galactosyl sulphatide levels in target cells within said subject.



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